

Federal Operating Permit
Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:	Michigan Cogeneration System, Inc.
Facility Name:	Michigan Cogeneration System, Inc.
Facility Location:	9850 Furnace Road Lorton, Virginia 22079
Registration Number:	71961
Permit Number:	NRO71961

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 4 through 36)

Effective Date

Expiration Date

Regional Director

Signature Date

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Facility Information

Permittee

Michigan Cogeneration Systems, Inc.
46280 Dylan Drive, Suite 200
Novi, MI. 48377

Responsible Official

Dennis Plaster
Vice President of Operations

Facility

Michigan Cogeneration Systems, Inc.
9850 Furnace Road
Lorton, VA. 22079

Contact Person

Dennis Plaster
Vice President of Operations
(585) 948-8580

AIRS Identification Number: 51-059-0575

Facility Description: SIC Code 4911 – The facility operates eight internal combustion engines which combust landfill gas, generated by the adjacent I-95 Landfill, to produce electricity for re-sale. Each engine is a Caterpillar model 3516, rated at 8.5 MMBtu/hr heat input and 800 kW of electrical output while firing landfill gas. Natural gas can be used as an auxiliary fuel. The facility operates under a State Air Pollution Control Board's new source review permit dated December 17, 2002 and a State Operating Permit (SOP), dated May 10, 2000, which implemented Reasonably Available Control Technology (RACT) requirements for volatile organic compounds (VOCs) and nitrogen oxides (NO_x). The facility is a major source of NO_x and a Prevention of Significant Deterioration major source for carbon monoxide (CO).

Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burning Equipment							
P1-1	S1	Phase I - Caterpillar Internal Combustion Engine No. 1, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00
P1-2	S2	Phase I - Caterpillar Internal Combustion Engine No. 2, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00
P1-3	S3	Phase I - Caterpillar Internal Combustion Engine No. 3, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00
P1-4	S4	Phase I - Caterpillar Internal Combustion Engine No. 4, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00
P2-1	S5	Phase II - Caterpillar Internal Combustion Engine No. 1, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
P2-2	S6	Phase II - Caterpillar Internal Combustion Engine No. 2, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00
P2-3	S7	Phase II - Caterpillar Internal Combustion Engine No. 3, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00
P2-4	S8	Phase II - Caterpillar Internal Combustion Engine No. 4, Model 3516, landfill gas-fired	8.55 MMBtu/hr heat input, 800 kW power output	---	---	---	12/17/02 and 5/10/00

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Fuel Burning Equipment Requirements – (Emission Units P1-1, P1-2, P1-3, P1-4, P2-1, P2-2, P2-3, and P2-4)

1. **Fuel Burning Equipment Requirements – Limitations - NO_x, CO, and VOC** emissions from the engines shall be controlled by combusting a very lean air-to-fuel mixture, and controlling combustion air and fuel temperatures.
(9 VAC 5-80-110, Condition 3 of 12/17/02 Permit and Condition 3 of 05/10/00 State Operating Permit)
2. **Fuel Burning Equipment Requirements – Limitations -** The exhaust line on each engine shall be fitted with a port from which exhaust gases can easily be sampled for oxygen gas content to determine air-to-fuel ratio. Oxygen monitors shall be calibrated, operated and maintained in accordance with manufacturer's written recommendations.
(9 VAC 5-80-110 E, Condition 3 of 12/17/02 Permit and Condition 3 of 05/10/00 State Operating Permit)
3. **Fuel Burning Equipment Requirements – Limitations -** Each engine shall be operated such that the oxygen content (O₂ as percent) in the exhaust of each engine is maintained within +/- 0.5 percent of the average exhaust oxygen content (O₂ as percent) as determined during the most recent performance test. An alternative range may be established based on the results of testing conducted in accordance with Condition 20, provided the Regional Air Compliance Manager of the DEQ's NRO in advance, agrees upon the alternative. This condition applies at all times except start-up and shutdown.
(9 VAC 5-80-110 E)
4. **Fuel Burning Equipment Requirements – Limitations -** The exhaust stack of each engine shall be equipped with a device to monitor temperature of the exhaust gases. The device shall be accurate to within five percent.
(9 VAC 5-80-110 E)
5. **Fuel Burning Equipment Requirements – Limitations -** Each engine shall be operated such that the temperature in the exhaust stack of each engine is maintained within +/- 50 °F of the temperature as determined during the most recent stack test. An alternative range may be established based on the results of testing conducted in accordance with Condition 20, provided the Regional Air Compliance Manager of the DEQ's NRO in advance, agrees upon the alternative. This condition applies at all times except start-up and shutdown.
(9 VAC 5-80-110 E)
6. **Fuel Burning Equipment Requirements – Limitations -** The approved fuels for the engines are landfill gas of at least 300 Btu per dry standard cubic foot (dscf) for normal operation and natural gas as an auxiliary fuel.
(9 VAC 5-80-110, Condition 4 of 12/17/02 Permit)

7. **Fuel Burning Equipment Requirements – Limitations** - The engines shall consume no more than a combined 1.208×10^9 standard cubic feet of landfill gas per year as primary fuel and 13.6×10^6 standard cubic feet of natural gas as an auxiliary fuel, calculated monthly as the sum of the previous consecutive twelve month period. (9 VAC 5-80-110 and Condition 5 of 12/17/02 Permit)

8. **Fuel Burning Equipment Requirements – Limitations** - Emissions from the operation of each engine shall not exceed the limits specified below:

Nitrogen Oxides (as NO ₂)	0.0044 lb/kW-hr (3-hr avg.) ¹ 3.5 lbs/hr ² 15.3 tons/yr ²
Volatile Organic Compounds	0.0015 lb/kW-hr (3-hr avg.) ³ 1.2 lbs/hr ² 5.3 tons/yr ²
Carbon Monoxide	7.5 lb/hr ² 32.9 tons/yr ²

(9 VAC 5-80-110, ¹:Condition 3 of 5-10-00 State Operating Permit, ²:Condition 7 of 12/17/02 Permit, and ³:Condition 4 of 5-10-00 State Operating)

9. **Fuel Burning Equipment Requirements – Limitations** - Visible emissions from each of the engine stacks shall not exceed five percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed twenty percent opacity, as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). (9 VAC 5-80-110 and Condition 8 of the 12/17/02 Permit)

10. **Fuel Burning Equipment Requirements – Limitations** - The permittee shall not draw landfill gas when the engines are out of service. (9 VAC 80-110 and Condition 6 of 12/17/02 Permit)

11. **Fuel Burning Equipment Requirements – Limitations** - At all times, including periods of start-up, shutdown and malfunction, all engines and insignificant emission units shall be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Equipment operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at a minimum. (9 VAC 5-80-110 and Condition 6 of 5/10/00 State Operating Permit)

- 12. Fuel Burning Equipment Requirements – Monitoring** - The permittee shall monitor and record the oxygen content (O_2 as a percent) in the exhausts of two of eight engines on each day of weekday operations, for a total of at least sixty-five readings annually for each engine, or alternative schedule as approved by the Regional Air Compliance Manager of the DEQ's NRO.
(9 VAC 5-80-110 E, Condition 10 of 12/17/02 Permit and Condition 7 of the 5/10/00 State Operating Permit)
- 13. Fuel Burning Equipment Requirements – Monitoring** - The permittee shall monitor and record the temperature of the exhaust gases in the exhaust stacks of two of eight engines on each day of weekday operations, for a total of at least sixty-five readings annually for each engine.
(9 VAC 5-80-110 E and Condition 7 of the 5/10/00 State Operating Permit)
- 14. Fuel Burning Equipment Requirements – Monitoring** - At least once every three months, the permittee shall measure NO_x emissions in the exhaust stack of each of engine, while each engine is operating at base load, using a properly calibrated and certified portable gas analyzer. The first measurements shall begin within three months of completion of the performance tests conducted as required in Condition 20. The measurement shall consist of the average of instantaneous concentration readings that are obtained at the start, middle and end of a five-minute period. The first (of three) measurements will start after the portable analyzer has sampled engine exhaust for at least one minute. The three individual measurements will be recorded and tabulated to obtain an average NO_x measurement. The results shall be compared to the average base load concentration obtained during the most recent performance test as a means to provide a reasonable assurance of compliance with the short-term NO_x emission limits in Condition 8. The results of the measurements and comparison shall be made available for inspection by DEQ and shall be current for the most recent five years. The Regional Air Compliance Manager of the DEQ's NRO shall be notified in writing (by fax, email, or mail) seven days in advance of the testing. An alternative testing schedule may be developed, provided the Regional Air Compliance Manager of the DEQ's NRO agrees to the alternative in advance of its use.
(9 VAC 5-80-110 E and Condition 7 of the 5/10/00 State Operating Permit)
- 15. Fuel Burning Equipment Requirements – Monitoring** - At least once every three months, the permittee shall measure VOC emissions in the exhaust stack of each engine, while each engine is operating at base load, using a properly calibrated and certified portable gas analyzer. The first measurements shall begin within three months of completion of the performance tests conducted as required in Condition 20. The measurement shall consist of the average of instantaneous concentration readings that are obtained at the start, middle and end of a five-minute period. The first (of three) measurements will start after the portable analyzer has sampled engine exhaust for at least one minute. The three individual measurements will be recorded and tabulated to obtain an average VOC measurement. The results shall be compared to the average base load concentration obtained during the most recent performance test as a means to provide a reasonable assurance of

compliance with the short-term VOC emission limits in Condition 8. The results of the measurements and comparison shall be made available for inspection by DEQ and shall be current for the most recent five years. The Regional Air Compliance Manager of the DEQ's NRO shall be notified in writing (by fax, email, or mail) seven days in advance of the testing. An alternative testing schedule may be developed, provided the Regional Air Compliance Manager of the DEQ's NRO agrees to the alternative in advance of its use.

(9 VAC 5-80-110 E and Condition 7 of the 5/10/00 State Operating Permit)

16. Fuel Burning Equipment Requirements – Monitoring - At a minimum, the following process parameters shall be monitored and recorded for each periodic test required in Condition 14 and 15:

- a. NO_x and VOC concentrations;
- b. The electrical output for each engine-generator set determined during each test;
- c. Date and actual duration of the measurement.

(9 VAC 5-80-110 F and Condition 7 of the 5/10/00 State Operating Permit)

17. Fuel Burning Equipment Requirements – Recordkeeping - The permittee shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be agreed upon by the Regional Air Compliance Manager of the DEQ's NRO. These records shall include, but are not limited to the following:

- a. The consumption of landfill gas and natural gas by the engines, calculated monthly as the sum of each consecutive twelve month period;
- b. The actual operating hours of each engine determined on a monthly basis;
- c. Electrical output of each engine generator determined on a monthly basis;
- d. Results of oxygen monitoring performed in accordance with Condition 12;
- e. Results of the temperature monitoring performed in accordance with Condition 13;
- f. Records of the operator training required in Condition 11, including a statement of time, place and nature of training.
- g. Records of all scheduled and unscheduled maintenance on the engines, including date, time and type of maintenance performed.

- h. Quarterly NO_x and VOC concentrations record as provided in Condition 14 and 15.
- i. Corrective actions taken in accordance with Conditions 18 and 19, including date and time of actions taken, and results of follow-up NO_x and/or VOC monitoring.
- j. Performance test results, including data correlating operating parameters to emissions as provided in Condition 20.

These records shall be made available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 F, Condition 12 of the 12/17/02 Permit and Condition 7 of the 5/10/00 State Operating Permit)

- 18. Fuel Burning Equipment Requirements – Corrective Action** - For any engine, if the oxygen monitored in accordance with Condition 12 is out of the parameter range established in accordance with Condition 3, the permittee shall perform engine diagnostics, maintenance and adjustments as necessary to correct the out-of-range value. Following the corrective action, the permittee shall conduct a five-minute NO_x measurement, as described in Condition 14, using a properly calibrated and certified portable analyzer. The results shall be compared to the average concentration determined during the most recent performance test to provide a reasonable assurance of compliance with the emission limits in Condition 8.
(9 VAC 5-80-110 E and Condition 7 of the 5/10/00 State Operating Permit)

- 19. Fuel Burning Equipment Requirements – Corrective Action** - For any engine, if the temperature monitored in accordance with Condition 13 is out of the parameter range established in accordance with Condition 5, the permittee shall perform engine diagnostics, maintenance and adjustments as necessary to correct the out-of-range value. Following the corrective action, the permittee shall conduct a five-minute VOC measurement, as described in Condition 15, using a properly calibrated and certified portable analyzer. The results shall be compared to the average concentration determined during the most recent performance test to provide a reasonable assurance of compliance with the emission limits in Condition 8.
(9 VAC 5-80-110 E and Condition 7 of the 5/10/00 State Operating Permit)

- 20. Fuel Burning Equipment Requirements – Testing** - The permittee shall conduct EPA Reference Method compliance testing for NO_x, CO and VOC in the exhaust stacks of each engine to determine compliance with the short-term limits contained in Condition 8. The testing shall also be used to develop a correlation between air-to-fuel ratio and exhaust oxygen, exhaust oxygen and NO_x and CO emissions, and temperature and VOC emissions. The correlation shall be recorded in tabular or graphical format and maintained on site for the duration of this permit. The compliance testing shall be conducted within 180 days of the issuance of this permit in accordance with the test methods presented in Condition 21, or other procedures approved in advance by the Regional Air Compliance Manager the DEQ's NRO.

The details of the tests shall be arranged with the Regional Air Compliance Manager of the DEQ's NRO, including submission of a test protocol at least thirty days prior to the test.

(9 VAC 5-80-110 and Condition 7 of the 5/10/00 State Operating Permit)

21. **Fuel Burning Equipment Requirements – Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25A, 25C, and ALT-078
NO _x	EPA Method 7, 7E
CO	EPA Method 10
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

22. **Fuel Burning Equipment Requirements – Reporting** – For each engine, if the values of oxygen monitored in accordance with Condition 12 fall out of range with the values established in Condition 3, the permittee shall submit a report to the Regional Air Compliance Manager of the DEQ's NRO, detailing the occurrence within three business days of discovering the occurrence. The report shall include the out-of-range value, the acceptable oxygen range, the duration of the occurrence, corrective actions taken, results of follow-up NO_x testing, and the ambient air conditions at the time of the occurrence.

(9 VAC 5-80-110 E and F, Condition 10 of 12/17/02 Permit and Condition 7 of the 5/10/00 State Operating Permit)

23. **Fuel Burning Equipment Requirements – Reporting** – During periods when the ability of the engines to burn the available landfill gas is curtailed, notification shall be provided to the Regional Air Compliance Manager of the DEQ's NRO and to those Fairfax County officials who are responsible for controlling excess landfill gas emissions by flaring or other appropriate means.

(9 VAC 5-80-110 and Condition 6 of 12/17/00 Permit)

24. **Fuel Burning Equipment Requirements – Reporting** – Two (2) copies of the compliance test results from the testing required in Condition 20 shall be submitted to the Regional Air Compliance Manager of DEQ's NRO, within forty-five days of completing the test. The test report shall include the tables or graphs developed as required in Condition 20 which correlate engine operating parameters to emissions.

(9 VAC 5-80-110 F)

Insignificant Emission Units

25. Insignificant Emission Units - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity 9 VAC 5-80-720 C)
Lube 1	Lube oil storage tank	9 VAC 5-80-720B	VOC	2,500 gallon
Waste 1	Waste oil storage tank	9 VAC 5-80-720B	VOC	1,000 gallon
T-1	Condensate holding tank	9 VAC 5-80-720C	VOC	200 gallon
T-2	Condensate holding tank	9 VAC 5-80-720C	VOC	200 gallon
Crank 1	Engine crankcase oil storage vents	9 VAC 5-80-720B	VOC	Unknown

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Permit Shield & Inapplicable Requirements

26. Permit Shield & Inapplicable Requirements - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 60, Part JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Not applicable to units manufactured prior to 2007

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of

the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

General Conditions

27. **General Conditions - Federal Enforceability** -All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)
28. **General Conditions - Permit Expiration**- This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
29. **General Conditions - Permit Expiration**-The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
30. **General Conditions - Permit Expiration**-If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
31. **General Conditions - Permit Expiration**-No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
32. **General Conditions - Permit Expiration**-If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

33. **General Conditions - Permit Expiration**-The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)
34. **General Conditions -Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- The date, place as defined in the permit, and time of sampling or measurements.
 - The date(s) analyses were performed.
 - The company or entity that performed the analyses.
 - The analytical techniques or methods used.
 - The results of such analyses.
 - The operating conditions existing at the time of sampling or measurement.
- (9 VAC 5-80-110 F)
35. **General Conditions -Recordkeeping and Reporting** - Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
(9 VAC 5-80-110 F)
36. **General Conditions -Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than **March 1** and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
- The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
 - All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - Exceedance of emissions limitations or operational restrictions;
 - Excursions from control device operating parameter requirements, as

documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

(3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

37. General Conditions - Annual Compliance Certification - Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- b. The identification of each term or condition of the permit that is the basis of the certification.
- c. The compliance status.
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- f. Such other facts as the permit may require to determine the compliance status of the source.

- g. One copy of the annual compliance certification shall be submitted to EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3_APD_Permits@epa.gov

(9 VAC 5-80-110 K.5)

38. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Regional Air Compliance Manager of the DEQ's NRO within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within fourteen days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to Condition 36 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

39. **General Conditions - Failure/Malfunction Reporting** - In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Regional Air Compliance Manager of the DEQ's NRO by facsimile transmission, telephone, electronic mail, or telegraph of such failure or malfunction and shall within fourteen days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Regional Air Compliance Manager of the DEQ's NRO.
(9 VAC 5-20-180 C)

40. **General Conditions - Severability** - The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

41. **General Conditions - Duty to Comply** - The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.
(9 VAC 5-80-110 G.2)

42. **General Conditions - Need to Halt or Reduce Activity not a Defense** -It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)
43. **General Conditions - Permit Modification** -A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)
44. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)
45. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
46. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)
47. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program emission fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)
48. **General Conditions - Fugitive Dust Emission Standards** - During the operation of a stationary source or any other building, structure, facility, or installation, no owner

or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

49. **General Conditions - Startup, Shutdown, and Malfunction** - At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E)

50. **General Conditions - Alternative Operating Scenarios** - Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1.

(9 VAC 5-80-110 J)

51. General Conditions - Inspection and Entry Requirements - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- d. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

52. General Conditions - Reopening For Cause - The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

53. **General Conditions - Permit Availability** - Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)
54. **General Conditions - Transfer of Permits** - No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)
55. **General Conditions - Transfer of Permits** - In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within thirty days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
56. **General Conditions - Transfer of Permits** - In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within thirty days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
57. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of Condition 58 are met.
a. (9 VAC 5-80-250)
58. **General Conditions - Malfunction as an Affirmative Defense** - The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
- a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - b. The permitted facility was at the time being properly operated.
 - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any

steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

(9 VAC 5-80-250)

59. **General Conditions - Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

(9 VAC 5-80-250)

60. **General Conditions - Malfunction as an Affirmative Defense** - The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

61. **General Conditions - Permit Revocation or Termination for Cause** - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9 VAC 5-80-190 C and 9 VAC 5-80-260)

62. **General Conditions - Duty to Supplement or Correct Application** - Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

63. **General Conditions - Stratospheric Ozone Protection** - If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 FR Part 82, Subparts A-F)

64. **General Conditions - Federal-Only Enforceable Requirements** - The Commonwealth of Virginia has not accepted delegation of the following applicable requirements which are required under the federal Clean Air Act and/or any of its applicable federal requirements:

40 CFR 63, Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Authority to enforce these standards is retained by EPA. They are not incorporated by reference into the Virginia regulations.
(40 CFR 63, Subpart ZZZZ)